# CHAPTER 1 Introduction

#### VISION STATEMENT

"To establish and maintain bicycling as a viable mode of transportation and integrate it with other modes of transportation; to assure that bicycling is safe for bicyclists of all abilities; and to encourage multijurisdictional coordination to plan, fund, design and construct bicycle projects."

The purpose of the Bike Plan is to increase the potential for bicycle transportation by integrating bicycling into the Alameda County transportation system. This plan was developed through input from the bicycling public, in coordination with local, regional, state and federal agencies.

Alameda County's transportation infrastructure is in the midst of change. With a population of 1.45 million, the study area encompasses high-density communities near the San Francisco Bay and medium to low density suburban and rural areas in the Tri-Valley communities of Dublin, Pleasanton and Livermore. Providing transportation choices is an important feature of the region's current transportation philosophy.

### **SETTING**

Alameda County is well-suited for accommodating bicycles as transportation as it has long dry summers and is relatively flat for most of its urbanized areas. These two conditions along with California's general interest in outdoor sports and the environment combine to make bicycling one of the most popular outdoor recreational activities. Bicycling as transportation is therefore a logical next step.

The 2004 *Countywide Transportation Plan* has two policy goals that promote bicycling: improving mobility and improving air quality. The functional requirements for fulfilling these goals include: "A balanced transportation system that employs a continuous network of freeways, parkways, major arterials, transit services and bicycle and pedestrian facilities to move people and goods as efficiently as possible". This bicycle plan will present the best choice of bicycle projects as a network for the future transportation system as well as to encourage bicycling.

In November 2000, voters in Alameda County sanctioned "Measure B". Measure B is the half-cent sales tax and is the continuation of an existing sales tax measure that expired in 2002. According to the voter-approved Expenditure Plan, Measure B will generate \$1.4 billion in transportation funding over the 20 year life of the Measure (2002 and 2022), including \$70 million for bicycle and pedestrian improvements. However, actual revenue is anticipated to be much higher. Of this, 25 percent will be available to the county for implementation of the countywide bicycle plan developed by the Alameda County Congestion Management Agency (ACCMA) and the countywide pedestrian plan developed by the Alameda County Transportation Improvement Authority (ACTIA).

The Countywide Bicycle Plan represents direct input from staff, bicycle advocates, and local citizens. Based on this input, two problems were defined:

- Roads, old and new, are generally not as bicycle-friendly as desired; and
- It is unclear who is responsible for bikeway planning especially when facilities cross city boundaries.

A plan does not implement itself. Support from elected officials, staff, the cycling community and other residents are essential for the potential benefits of the Countywide Bicycle Plan to be realized. The future holds opportunities as well as challenges. The Plan identifies the steps that must be taken to capitalize on the opportunities and to face the challenges.

### WHAT IS THE PLAN AND WHY HAVE ONE?

This Plan framework provides the background, direction and tools to improve Alameda County's bicycling environment. The purpose of this Plan is to develop a strategy to encourage more bicycling for transportation in Alameda County. It is a comprehensive plan addressing policies, standards, education and intermodal linkages. This Plan includes recommended projects and programs to improve bicycle transportation and safety across city boundaries as well as connections to the neighboring counties of Contra Costa, Santa Clara, San Mateo, San Francisco and San Joaquin.

This Countywide Bicycle Plan focuses on facilities that provide direct, convenient connections to desired destinations such as workplaces, shops, parks, schools, libraries and greenways and to transit. It also identifies off-road trails that can be used for transportation and for recreation purposes. The Plan will help with interjurisdictional coordination in the planning of bike facilities that cross boundaries and affect more than one city or one planning agency. Without such a guide, opportunities for improvements could be missed or efforts could be uncoordinated. Finally, this Plan will serve as a tool to obtain bicycle project funding and program acquired funds. This Countywide Bicycle Plan will be incorporated into the Countywide Transportation Plan, which is updated every five years.

#### WHY ENCOURAGE BICYCLE TRANSPORTATION?

States and communities of all sizes throughout the country are undertaking significant investments in facilities to encourage bicycle and pedestrian transportation. Why should cities and counties encourage bicycle transportation? Non-motorized travel has benefits in a number of areas, as outlined below.

### **Personal Reasons**

- Offers least expensive mode of travel (except for walking).
- Reduces travel time compared to walking or where parking is scarce.
- Provides door-to-door access.
- Provides cardiovascular fitness.

#### **Environmental Reasons**

- Reduces air pollution/global warming/acid rain.
- Decreases reliance on petroleum products.
- Decreases noise pollution from automobiles.
- Decreases land area devoted to parking.
- Is the most energy-efficient mode of transportation?

### **Societal Reasons**

- Reduces vehicle miles of travel.
- Improves public health through a cleaner environment, more exercise.
- Provides mobility for citizens without cars or those too young to drive.
- Improves overall quality of life.
- Increases 5-minute catchment area of public transit from \(\frac{1}{4}\)-mile by walking to 1-mile by biking.

Additionally, federal policy through the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA) legislation strongly supports such activities, and significant sources of funding for these types of projects have been made available through the Transportation Enhancement Program and, in non-attainment areas, through the Congestion Mitigation and Air Quality (CMAQ) improvement program of SAFETEA.

### PLAN DEVELOPMENT PROCESS

In July 2001, the ACCMA Board of Directors adopted the first Alameda Countywide Bicycle Plan. The 2001 Plan was developed by an appointed Bicycle Task Force, in conjunction with the ACCMA and Alameda County Public Works Department. Cross county corridors and alignments were determined by assembling information from discussions with city staff, reviewing locally adopted bicycle plans and route maps, and collecting data in the field and from other sources. The purpose of the countywide bicycle network was to connect local jurisdictions and or/countywide attractions by maximizing existing bicycle facilities and planning for new or upgraded facilities. The proposed bicycle network also provides connections to adjacent counties.

In 2005, the ACCMA began a focused update of the 2001 Alameda Countywide Bicycle Plan that was funded by ACTIA Measure B and TDA funds. The update was led by Alameda County Technical Advisory Committee (ACTAC) with input from ACTIA's Bicycle and Pedestrian Advisory Committee (BPAC) and ABAG, East Bay Regional Park District, BART, AC Transit, Port of Oakland, UC Transit, LAVTA, MTC, Caltrans and the East Bay Bicycle Coalition.

The key components of the focused update were to:

- Identify facilities that have been completed since the Plan was adopted.
- Revise maps and appendices to add new projects, remove completed or deleted projects, and modify alignments on the Countywide Bicycle network.
- Develop a fiscally constrained list of High Priority Projects.
- Update graphics to improve readability for the general public and local agencies and make it easier to incorporate network changes. Develop graphics that are compatible with GIS.
- Develop an amendment process for including minor changes to the Plan and allowing for substitute projects between updates as well as developing a mechanism to track future changes.
- Update project costs and revise funding section to reflect new or modified sources of funding.
- Improve ability to tabulate facilities by category (e.g., city, planning area, county).
- Clarify issues related to the Bay Trail and Transit Hubs.
- Show the relationship between the Countywide Bicycle Plan High Priority projects and the Regional Bicycle Plan and the Countywide Pedestrian Plan High Priority projects, as appropriate.
- Produce an updated Alameda Countywide Bicycle Plan document, specifically Chapters 3 and 5 and related Appendices.
- Update remaining chapters to make information and statistics current.

### PLAN COORDINATION

The recommendations of the Alameda Countywide Bicycle Plan will need to be coordinated with other agencies and stakeholders. The Bicycle Transportation Account (BTA) requires a discussion of interagency coordination so that bicycle planning is well integrated with other efforts in the county. Appendix A-1 shows how the BTA requirements are met in the Alameda Countywide Bicycle Plan. Ongoing programs that relate both directly and indirectly to non-motorized transportation are discussed below, along with how the Countywide Bicycle Plan is consistent with and complementary to other plans and programs.

### Local Agency Input into the Countywide Bicycle Plan

Each city in the county as well as Alameda County, ABAG, MTC, Caltrans, EBRPD, LAVTA, BART and AC Transit provided input on the Countywide Bicycle Plan. Throughout the planning process, many agencies and members of the public provided written comments regarding specific issues they would like to see addressed by the Countywide Bicycle Plan. Input was received on the cross-county bicycle route alignments through individual cities and on connectivity issues between cities.

The status of bicycle planning efforts of local agencies within Alameda County and regional connections to adjacent counties is summarized in Chapter 2. Ten of the 14 cities in Alameda County have recently adopted or are in the process of updating bicycle plans as has the EBRPD. In addition, the Alameda

County Public Works Agency (PWA) has updated their bicycle plan for the western unincorporated areas of San Lorenzo, Castro Valley, Ashland, Cherryland, and Fairview.

## Alameda County Congestion Management Agency

The ACCMA was created in 1991 by a joint powers agreement among the cities of Alameda County, the County of Alameda and the transit operators. The ACCMA was formed in response to Proposition 111, passed by California voters in 1990. Proposition 111 increased the statewide fuel tax to fund transportation projects and required all urban counties to designate a congestion management agency to plan for use of these new funds.

The ACCMA has two plans which guide its approach to managing congestion and improving mobility: the 25-year Countywide Transportation Plan and the five-year Congestion Management Program (CMP). Based on its long range plan and the CMP, projects are funded from federal, state and local sources, including: Federal Surface Transportation Program (STP)/Congestion Mitigation & Air Quality Program (CMAQ), State Transportation Improvement Program (STIP), Transportation Development Act (TDA), Measure B (discussed below) and other local funds, such as development fees. The CMA is the program administrator for the Transportation Fund for Clean Air (TFCA).

## **Alameda County Transportation Improvement Authority**

ACTIA is responsible for implementing transportation projects funded by the existing and future half-cent sales tax in Alameda County, known as Measure B. Five percent of the total funds from the recently approved measure (or approximately \$70 million over twenty years) would be earmarked for bicycle and pedestrian projects. Twenty-five percent would be for regional projects and 75 percent would go to the individual cities to implement city priorities.

The 25 percent designated for regional projects would be available for funding specific projects as well as planning and design support and the countywide bike/pedestrian coordinator position. The Year 2000 Measure B states that the bike and pedestrian program can fund projects that expand and enhance bicycle and pedestrian safety and facilities in Alameda County, focusing on high priority projects like gap closures, and intermodal connections. Allocation and use of funds are guided by the rules described in the Expenditure Plan which states that the 25 percent funds will be reserved for regional planning and regional projects, including:

- Preparation of local master plans, design support services to local agencies;
- Funding for a Countywide Bicycle and Pedestrian Coordinator position; and
- Funding for high priority regional capital projects identified in the Countywide Bicycle Plan developed by the ACCMA and in the Countywide Strategic Pedestrian Plan developed by ACTIA.

High priority will be given to EBRPD projects included in the Countywide Bicycle Plan. Priority will also be given to projects which significantly leverage other outside funding sources.

The 75 percent funds would go directly to cities for specific capital projects that were identified and prioritized through a local or regional planning process and will be allocated to cities based on population.

#### Transit

The Countywide Bike Plan is consistent with transit improvement efforts in that it encourages nonmotorized access to transit so that countywide bicycle trips can be linked with transit. The 2001 Bicycle Plan addressed design recommendations for existing and future transit stations and identified need for improvement of bicycle access to transit, but it did not define how this would be implemented. In the 2006 Update to the Bicycle Plan, Transit-Priority Zones were defined through which access to transit and improved transit connections to the countywide bicycle network could be implemented. This is accomplished by improving connections to transit stations including all BART stations, ACE stations, Amtrak stations, and ferry terminals and improving connections to buses on trunkline service routes.

## East Bay Regional Park District

The East Bay Regional Park District (EBRPD) is the Regional Special District which functions as the Alameda (and Contra Costa County) Parks and Recreation Agency. As of 2006, EBRPD manages and maintains 31 regional parklands and 40 miles of trails in over 51,000 acres of open space in Alameda County. These trails connect parks, residential areas, business parks, multi-modal transportation facilities and function as both recreation and non-motorized transportation corridors. As an example of how EBRPD works with local jurisdictions on trails management, EBRPD currently manages and maintains the San Francisco Bay Trail where the trail is located on EBRPD property.

# **Bay Area Air Quality Management District**

The Bay Area Air Quality Management District (BAAQMD) is the agency charged with developing programs to implement the Clean Air Plan (CAP) for the nine-county Bay Area region. The Countywide Bicycle Plan is consistent with the BAAQMD goals and policies. Specifically, the Transportation Control Measures (TCM) developed by BAAQMD is consistent with the implementation of a countywide bicycle plan (presented in Appendix A-2).

## **Metropolitan Transportation Commission**

MTC is the regional agency responsible for Bay Area transportation planning and coordination, and prepares the Regional Transportation Plan (RTP) addressing the region's transportation needs for a twenty-five year horizon. MTC is currently updating the 2001 Regional Bicycle Plan. The ACCMA will work with MTC to amend the updated Countywide Bicycle Plan into the Regional Bicycle Plan. The projects listed in the Alameda Countywide Bicycle Plan should be considered first priority for the regional bicycle network in Alameda County.

#### **GOALS AND OBJECTIVES**

The Alameda Countywide Bicycle Plan establishes the following goals and objectives to construct a countywide bicycle network, provide countywide connections to transit, foster bicycling as a mode of travel, promote bicycle safety and education and implement the Countywide Bicycle Plan. The detailed goals and objectives are listed below.

## Establish a Countywide Bicycle Network

Create and maintain an inter-county and intra-county bicycle network that is safe, convenien and continuous.

# **Objectives**

- Increase the potential for bicycle transportation by closing gaps in existing bikeways.
- Designate appropriate bicycle facilities to serve routes which link major activity centers, including transit stations, schools, parks and employment and shopping centers, as well as routes which serve major corridors.
- Designate appropriate bicycle facilities on routes linking schools, after-school child care facilities, libraries, parks, and recreational sites to facilitate the mobility of school-aged children.
- Consider the needs of bicyclists for smooth and level pavement in all roadway maintenance practices.
- Include bike/pedestrian facilities in all transportation projects where feasible and appropriate.

## **Integrate Countywide Bicycle Network**

Integrate bicycle travel in transportation planning activities and in transportation improvement projects.

### **Objectives**

- Include a bicycle and pedestrian element in all transportation studies.
- Encourage and facilitate multimodal interface by including bike parking at multimodal transfer points and by supporting bikes-on-board transit vehicles.
- Coordinate with other local, regional, state, and federal agencies to plan, design, fund and construct bicycle projects.
- Utilize transportation models based on person-trips and estimate future bike trips and walking trips.
- Develop a checklist of guidelines that address bicycle and pedestrian access to be used in the planning and programming of all CMA-funded transportation projects.

# Foster Bicycling as a Mode of Travel

Encourage policies and actions that foster bicycling as a mode of travel.

# Objectives

- Encourage land use plans to include bicycle/pedestrian connections.
- Promote pavement management programs that encourage bicycle/pedestrian travel.
- Encourage bike parking facilities at employment sites, schools, and shopping areas.
- Encourage bicycling as a means to reduce traffic congestion, particularly in local TDM plans.
- Address impacts of development or transportation projects on bicycle/pedestrian access, circulation and safety.
- Establish guidelines that encourage:
  - Bicycle parking ordinances
  - Bicycle parking facilities
  - Showers/lockers ordinances
  - City bicycle fleets
  - Bicycle/car-pooling/transit programs (e.g. through the implementation of financial incentive programs)
- Encourage the establishment of citation diversion programs for bicyclists.
- Promote bicycle planning and engineering training programs for city and county staff.

# **Promote Bicycle Safety and Education**

Improve bicycle safety through facilities, education and enforcement.

# Objectives

- Identify primary bicycle accident types, locations and ages of individuals involved in the bicycle
  accidents by periodically reviewing the Statewide Integrated Traffic Record System (SWITRS) and
  determine measures to mitigate these collisions.
- Develop a proactive program to identify and eliminate obstacles, including deferred maintenance.
- Encourage bicycle safety education programs targeted at the following audiences in order to reduce bicycle accident rates, improve public awareness of bicycling and increase bicycle mode share:
  - adult cyclists
  - elementary school students

- middle and high school students
- motorists
- general public
- Develop safety programs and design guidelines for multimodal facilities that will alleviate conflicts between bicyclists and other users such as pedestrians, roller bladers, joggers, and equestrians.
- Encourage enforcement efforts on the most common motorist and bicyclist violations.

## Promote Implementation of the Countywide Bicycle Plan

Maximize the use of public and private resources in establishing the bikeway network.

## **Objectives**

- Maintain designated bikeways as well as all roadways as part of a regularly scheduled maintenance program.
- Consider bicycle volumes and bicycle routing in the prioritizing of roadways in the pavement management system.
- Incorporate bicycle/pedestrian access in non-freeway roadway projects to provide such facilities most cost-effectively.
- Develop a prioritized list of bicycle projects to be able to maximize funding opportunities.
- Encourage public/private, inter-jurisdictional and intra-jurisdictional partnerships in designing, funding and constructing new projects.

#### **BIKEWAY DESCRIPTIONS**

The following descriptions of bicycle-related terms are provided to assist readers who are unfamiliar with bicycle terminology. The terms bicycle and bike are interchangeable. See Appendix C-1 for a more detailed description.

#### Bikeway

A thoroughfare suitable for bicycles—it may either exist within the right-of-way of other modes of transportation, such as highways, or along a separate and independent corridor.

## **Bicycle Facilities**

A general term denoting improvements and provisions to accommodate or encourage bicycling, including parking facilities, maps, all bikeways and shared roadways.

# Bicycle Path (Bike Path or Class 1)

A bikeway physically separated from motorized vehicular traffic and either within the highway right-of-way or within an independent right-of-way. Bike path facilities are often excellent recreational routes and can be developed where right-of-way is available. Typically, bike paths are a minimum of 10 feet to 12 feet wide, with an additional graded area maintained on each side of the path. These facilities are usually shared with other non-motorized modes of travel.

# Bicycle Lane (Bike Lane or Class 2)

A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes are ideal for minor thoroughfares or collectors. Under certain conditions, bike lanes may be beneficial on streets with significant traffic volumes and/or speeds. The Highway Design Manual (HDM) specifies the minimum width for bike lanes under various curb and on-street parking conditions. The HDM also states that "for greater safety", widths wider than the minimums should be provided "wherever possible".

## Signed Bike Route (Class 3)

A segment of a system of bikeways designated by appropriate directional and/or informational signs. In this plan, a Class 3 signed bike route may be either a local or residential street, bicycle boulevard, an arterial with wide outside lanes, or a roadway with a paved shoulder.

### **Paved Shoulder**

The part of the highway that is adjacent to the regularly traveled portion of the highway, is on the same level as the highway, and when paved can serve as a bikeway. Paved shoulders should be at least four feet wide and additional width is desirable in areas where speeds are high and/or a large percentage of trucks use the roadway.

#### Wide Outside Lane

An outside (curb) lane on a roadway that does not have a striped bike lane, but is of sufficient width for a bicyclist and motorist to share the lane with a degree of separation. A width of 14 feet is recommended to safely accommodate both motor vehicles and bicycles.

### **Bicycle Boulevard**

A residential street that has been modified for bicyclist safety and access.